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NEWS 5 APR 24 CA/CAPLUS now has more comprehensive patent assignee  
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NEWS 6 APR 26 USPATFULL and USPAT2 enhanced with patent  
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NEWS 8 APR 28 ENCOMPLIT/ENCOMPLIT2 search fields enhanced  
NEWS 9 APR 28 Limits doubled for structure searching in CAS  
REGISTRY  
NEWS 10 MAY 08 STN Express, Version 8.4, now available  
NEWS 11 MAY 11 STN on the Web enhanced  
NEWS 12 MAY 11 BEILSTEIN substance information now available on  
STN Easy  
NEWS 13 MAY 14 DGENE, PCTGEN and USGENE enhanced with increased  
limits for exact sequence match searches and  
introduction of free HIT display format  
NEWS 14 MAY 15 INPADOCDB and INPAFAMDB enhanced with Chinese legal  
status data  
NEWS 15 MAY 28 CAS databases on STN enhanced with NANO super role in  
records back to 1992  
NEWS 16 JUN 01 CAS REGISTRY Source of Registration (SR) searching  
enhanced on STN

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,  
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\*\*\*\*\* STN Columbus \*\*\*\*\*

FILE 'HOME' ENTERED AT 13:27:07 ON 12 JUN 2009

=> file reg		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.22	0.22

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STRUCTURE FILE UPDATES: 10 JUN 2009 HIGHEST RN 1155458-91-5

DICTIONARY FILE UPDATES: 10 JUN 2009 HIGHEST RN 1155458-91-5

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

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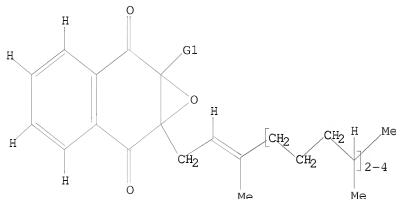
Uploading C:\Program Files\Stnexp\Queries\10542914-RCE.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 Me,Et

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 13:27:51 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1 TO 80

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 13:27:56 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 36 TO ITERATE

100.0% PROCESSED 36 ITERATIONS  
SEARCH TIME: 00.00.01

10 ANSWERS

L3 10 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	185.88	186.10

FILE 'CAPLUS' ENTERED AT 13:28:00 ON 12 JUN 2009  
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FILE COVERS 1907 - 12 Jun 2009 VOL 150 ISS 25  
FILE LAST UPDATED: 11 Jun 2009 (20090611/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAPlus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> file zcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.50	186.60

FILE 'ZCAPLUS' ENTERED AT 13:28:06 ON 12 JUN 2009  
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FILE COVERS 1907 - 12 Jun 2009 VOL 150 ISS 25  
FILE LAST UPDATED: 11 Jun 2009 (20090611/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

ZCPlus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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=> s l3

L4 186 L3

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.07

186.67

FILE 'REGISTRY' ENTERED AT 13:28:29 ON 12 JUN 2009  
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STRUCTURE FILE UPDATES: 10 JUN 2009 HIGHEST RN 1155458-91-5  
DICTIONARY FILE UPDATES: 10 JUN 2009 HIGHEST RN 1155458-91-5

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

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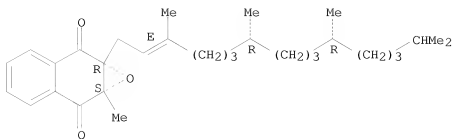
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d l3 scan

L3 10 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
IN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecenyl)-, [1aS-[1aa,7aa(2E,7S\*,11S\*)]]-(9CI)  
MF C31 H46 O3

Absolute stereochemistry.  
Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

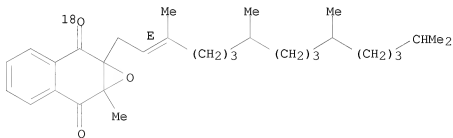
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L3 10 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN Naphth[2,3-b]oxirene-2,7-dione-2-180,  
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(9CI)

MF C31 H46 O3

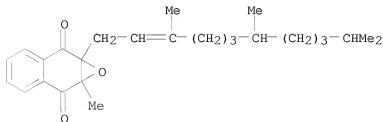
Double bond geometry as shown.



L3 10 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11-  
trimethyl-2-dodecen-1-yl)-

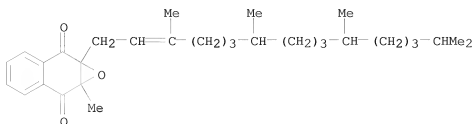
MF C26 H36 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L3 10 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

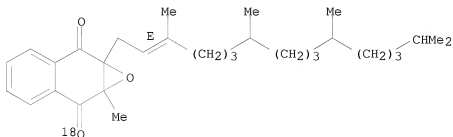
IN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecenyl)-, [1aR-[1a $\alpha$ ,7a $\alpha$ (2E,7R\*,11R\*)]]-(9CI)  
 MF C31 H46 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

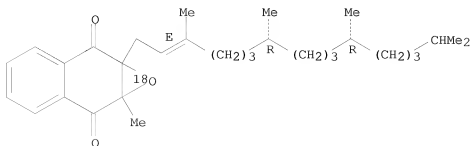
L3 10 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Naphth[2,3-b]oxirene-2,7-dione-2-18O,  
 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecenyl)-, (E)-  
 (9CI)  
 MF C31 H46 O3

Double bond geometry as shown.

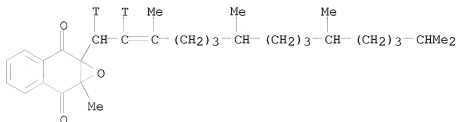


L3 10 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Naphth[2,3-b]oxirene-2,7-dione-1-18O,  
 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecenyl)-,  
 [7a(2E,7R,11R)]-[partial]- (9CI)  
 MF C31 H46 O3

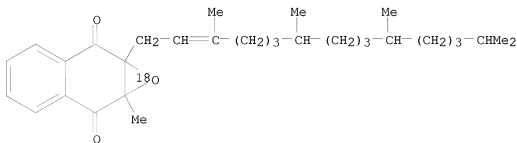
Absolute stereochemistry.  
 Double bond geometry as shown.



L3 10 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-  
 tetramethyl-2-hexadecenyl-1,2-t2)- (9CI)  
 MF C31 H44 O3 T2

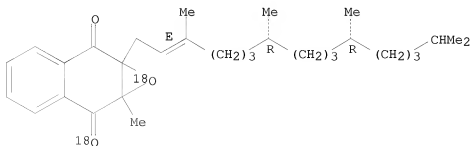


L3 10 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Naphth[2,3-b]oxirene-2,7-dione-1-18O,  
 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecenyl)- (9CI)  
 MF C31 H46 O3



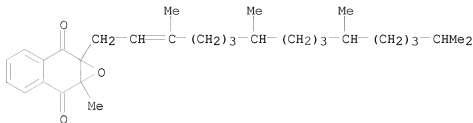
L3 10 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN  
 IN Naphth[2,3-b]oxirene-2,7-dione-1,2-18O2,  
 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecenyl)-,  
 [7a(2E,7R,11R)]-[partial]- (9CI)  
 MF C31 H46 O3

Absolute stereochemistry.  
 Double bond geometry as shown.



L3 10 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

IN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-  
MF tetramethyl-2-hexadecen-1-yl)-  
C31 H46 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> file zcaplus

COST IN U.S. DOLLARS

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SESSION

FULL ESTIMATED COST

0.48

187.15

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FILE COVERS 1907 - 12 Jun 2009 VOL 150 ISS 25

FILE LAST UPDATED: 11 Jun 2009 (20090611/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

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=> s 13

L5 186 L3

=> s 15 not py > 2003



L6 7378592 PY > 2003  
163 L5 NOT PY > 2003

=> l6 and treatment  
L6 IS NOT A RECOGNIZED COMMAND  
The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s l6 and treatment  
2607136 TREATMENT  
L7 9 L6 AND TREATMENT

=> d l7 ibib abs hitstr l-  
YOU HAVE REQUESTED DATA FROM 9 ANSWERS - CONTINUE? Y/(N):y

L7 ANSWER 1 OF 9 ZCAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 2002:667430 ZCAPLUS  
DOCUMENT NUMBER: 137:195570  
TITLE: Methods of treating chronic inflammatory diseases  
using carbonyl trapping agents  
INVENTOR(S): Shapiro, Howard K.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S., 23 pp., Cont.-in-part of U.S. Ser. No. 473,786,  
abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 5  
PATENT INFORMATION:

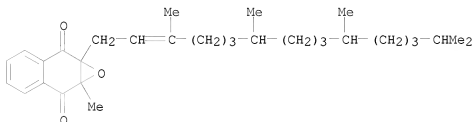
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 6444221	B1	20020903	US 1999-416120	19991012
PRIORITY APPLN. INFO.:			US 1992-906909	B2 19920630
			US 1995-473786	B2 19950607

OTHER SOURCE(S): MARPAT 137:195570

AB These and other objects of this invention are achieved by providing a novel method and compns. for the clin. treatment of chronic inflammatory diseases. This invention involves use of systemically administered compns. which include primary amine derivs. of benzoic acid as carbonyl trapping agents. These primary therapeutic agents act by chemical binding to and sequestering the aldehyde and/or ketone products of lipid peroxidn. Increased levels of lipid peroxidn. have been repeatedly demonstrated as a part of the non-enzymic "inflammatory cascade" process which underlies the secondary etiol. of chronic inflammatory diseases. P-Aminobenzoic acid (or PABA) is an example of the primary therapeutic agent of the present invention. PABA has a small mol. weight, is water soluble,

has a primary amine group that reacts with carbonyl-containing metabolites under physiol. conditions and is tolerated by the body in relatively high dosages and for extended periods. The carbonyl sequestering agents are used in combination with at least one co-agent to produce an addnl. beneficial physiol. effect of an anti-inflammatory nature. Such compns. are administered systemically entirely via the oral route. Co-agents of the present invention include anti-oxidants and free radical trapping compds. (e.g.,  $\alpha$ -tocopherol), compds. having indirect anti-oxidant activity (e.g., selenium), vitamins (e.g., pyridoxine HCl), compds. which facilitate kidney drug elimination (e.g., glycine), metabolites at risk of depletion (e.g., pantothenic acid), sulfhydryl containing chems. (e.g., methionine), compds. which facilitate glutathione activity (e.g., N-acetylcysteine), and non-absorbable polyamine co-agents (e.g., chitosan).

IT 25486-55-9, Vitamin K1 epoxide  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (methods of treating chronic inflammatory diseases using primary amine  
 derivs. of benzoic acid as carbonyl trapping agents and combination  
 with other agents)  
 RN 25486-55-9 ZCAPLUS  
 CN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-  
 tetramethyl-2-hexadecen-1-yl)- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 9 ZCAPLUS COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 1990:511418 ZCAPLUS

DOCUMENT NUMBER: 113:111418

ORIGINAL REFERENCE NO.: 113:18777a,18780a

TITLE: Vitamin K1 2,3-epoxide and quinone reduction:  
 mechanism and inhibition

AUTHOR(S): Preusch, Peter C.; Smalley, David M.

CORPORATE SOURCE: Dep. Chem., Univ. Akron, Akron, OH, 44325, USA

SOURCE: Free Radical Research Communications (1990), 8(4-6),  
 401-15

CODEN: FRRCEX; ISSN: 8755-0199

DOCUMENT TYPE: Journal

LANGUAGE: English

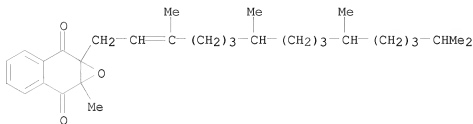
AB The chemical and enzymic pathways of vitamin K1 epoxide and quinone reduction have been investigated. Na borohydride treatment resulted in carbonyl reduction generating relatively stable compds. that did not proceed to quinone in the presence of base. NAD(P)H:quinone oxidoreductase (DT-diaphorase) reduction of vitamin K to the hydroquinone was a significant process in intact microsomes, but 1/5th the rate of the dithiothreitol (DTT)-dependent reduction. No evidence was found for DT-diaphorase catalyzed reduction of vitamin K1 epoxide, nor was it capable of mediating transfer of electrons from NADH to the microsomal epoxide reducing enzyme. Purified diaphorase reduced detergent-solubilized vitamin K1 10-5 as rapidly as it reduced dichlorophenylindophenol (DCPIP). Reduction of 10 µM vitamin K1 by 200 µM NADH was not inhibited by 10 µM dicoumarol, whereas DCPIP reduction was fully inhibited. In contrast to vitamin K3 (menadione), vitamin K1 (phyloquinone) did not stimulate microsomal NADPH consumption in the presence or absence of dicoumarol. DTT-dependent vitamin K epoxide reduction and vitamin K reduction were shown to be mutually inhibitory reactions, suggesting that both occur at the same enzymic site. On this basis, a mechanism for reduction of the quinone by thiols is proposed. Both the DTT-dependent reduction of vitamin K1 epoxide and quinone, and the reduction of DCPIP by purified DT-diaphorase were inhibited by dicoumarol, warfarin, lapachol, and sulfaquinoxaline.

IT 25486-55-9, Vitamin K1 2,3-epoxide

RL: RCT (Reactant); RACT (Reactant or reagent)

(reduction of, by sodium borohydride and by microsomal vitamin K epoxide reductase in dithiotreitol presence)

RN 25486-55-9 ZCAPLUS  
CN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecen-1-yl)- (CA INDEX NAME)



L7 ANSWER 3 OF 9 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1989:610334 ZCAPLUS  
DOCUMENT NUMBER: 111:210334  
ORIGINAL REFERENCE NO.: 111:34779a,34782a  
TITLE: Diagnostic importance of vitamin K1 and its epoxide measured in serum of dogs exposed to an anticoagulant rodenticide  
AUTHOR(S): Mount, Michael E.; Kass, Philip H.  
CORPORATE SOURCE: Sch. Vet. Med., Univ. California, Davis, CA, 95616, USA  
SOURCE: American Journal of Veterinary Research (1989), 50(10), 1704-9  
CODEN: AJVRAH; ISSN: 0002-9645

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Administration of vitamin K1, s.c., to anticoagulant-poisoned (diphenadione) dogs provided diagnostic information within 4 h, when vitamin K1 and its epoxide were measured in canine sera. Twelve dogs (2 groups of 6) were given 2.5 mg of diphenadione/kg for 3 days. Dogs were treated with vitamin K1, 2.5 or 5 mg/kg/day s.c. for 21 days, and their responses were compared. Four nonexposed control dogs were given 5 mg of vitamin K1/kg/day. Serum concentration of vitamin K epoxide was significantly higher in diphenadione-exposed dogs than in control dogs 1 to 4 h after the initial vitamin K1 treatment on day 4. Vitamin K epoxide/vitamin K1 ratios were similarly higher and became more distinct. Cessation of vitamin K1 therapy on day 24 resulted in prolongation of one-stage prothrombin times in diphenadione-exposed dogs, becoming clearly evident on day 27. Serum vitamin K1 concns. were not detectable on day 27 in diphenadione-exposed dogs, whereas serum vitamin K1 concns. were readily detectable in control dogs. One-stage prothrombin time changes, during days 24 to 32, indicated 5 mg of vitamin K1/kg provided better protection than did 2.5 mg of vitamin K1/kg. Coagulopathy in the dogs was resolved by day 32.

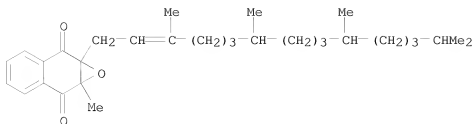
IT 25486-55-9

RL: BIOL (Biological study)

(of blood serum, in diphenadione-poisoned dogs treated with vitamin K1)

RN 25486-55-9 ZCAPLUS

CN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecen-1-yl)- (CA INDEX NAME)



L7 ANSWER 4 OF 9 ZCAPLUS COPYRIGHT 2009 ACS ON STN

ACCESSION NUMBER: 1984:453769 ZCAPLUS

DOCUMENT NUMBER: 101:53769

ORIGINAL REFERENCE NO.: 101:8351a,8354a

TITLE: Formation of 3-hydroxy-2,3-dihydrovitamin K1 in vivo: relationship to vitamin K epoxide reductase and warfarin resistance

AUTHOR(S): Preusch, Peter C.; Suttie, John W.

CORPORATE SOURCE: Coll. Agric. Life Sci., Univ. Wisconsin, Madison, WI, 53706, USA

SOURCE: Journal of Nutrition (1984), 114(5), 902-10

CODEN: JONUAI; ISSN: 0022-3166

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 3(2)-Hydroxy-2,3-dihydrovitamin K1 (I) [82162-05-8] was isolated and identified by comparison of its UV, mass spectra, and high-performance liquid chromatog. (HPLC) retention times with those of synthetic stds., and by its characteristic conversion to vitamin K1 quinone on treatment with the base triethylamine. I is formed from the vitamin K1 epoxide [25486-55-9], not from the vitamin K1 quinone, and can represent up to 3.5% of the dose and 13% of hexane-extractable metabolites present in liver 1 h after injection of 330 µg vitamin K1 epoxide/kg body weight. It is formed in both normal and warfarin [81-81-2]-resistant rat strains, but to a significantly greater extent in the latter. Unlike the I formed by warfarin-resistant rat liver microsomes in vitro, the metabolite formed from racemic vitamin K epoxide in vivo was not optically active, nor was its formation inhibited by coumarin anticoagulants under conditions that completely blocked vitamin K epoxide reduction in vivo. On this basis, I formation in vivo differs from its formation in vitro; it is not a product of vitamin K epoxide reductase in vivo, but of some other possibly nonenzymic reaction.

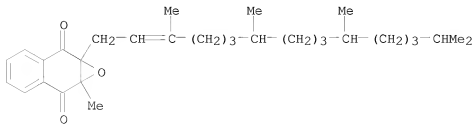
IT 25486-55-9

RL: BIOL (Biological study)

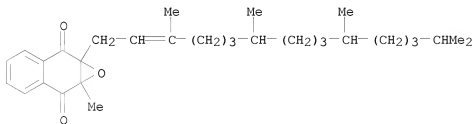
(hydroxydihydrovitamin K1 formation from, by rats, warfarin resistance in relation to)

RN 25486-55-9 ZCAPLUS

CN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecen-1-yl)- (CA INDEX NAME)



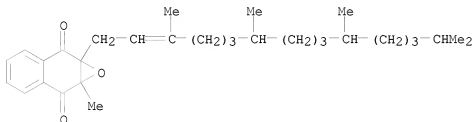
L7 ANSWER 5 OF 9 ZCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1981:528280 ZCAPLUS  
 DOCUMENT NUMBER: 95:128280  
 ORIGINAL REFERENCE NO.: 95:21435a,21438a  
 TITLE: Chemical model studies for the mechanism of vitamin K epoxide reductase  
 AUTHOR(S): Silverman, Richard B.  
 CORPORATE SOURCE: Dep. Chem., Northwestern Univ., Evanston, IL, 60201, USA  
 SOURCE: Journal of the American Chemical Society (1981), 103(19), 5939-41  
 CODEN: JACSAT; ISSN: 0002-7863  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Chemical studies for the mechanism of vitamin K epoxide reductase proposed previously are described using 2,3-dimethyl-1,4-naphthoquinone 2,3-epoxide (I) as a model for vitamin K epoxide. Treatment of I at room temperature with ethanethiol under acidic or basic conditions gives 2,3-dimethyl-2-ethylthio-3-hydroxy-2,3-dihydro-1,4-naphthoquinone (II), the product of epoxide ring opening by ethanethiol. The reaction of II at room temperature with Na ethylthiolate resulted in the rapid formation of 2,3-dimethyl-1,4-naphthoquinone, the reductive elimination product, and diethyldisulfide. These model reactions suggest that the enzyme-catalyzed mechanism proposed previously is quite plausible.  
 IT 25486-55-9  
 RL: PRP (Properties)  
 (model for)  
 RN 25486-55-9 ZCAPLUS  
 CN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecen-1-yl)- (CA INDEX NAME)



L7 ANSWER 6 OF 9 ZCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1971:73514 ZCAPLUS  
 DOCUMENT NUMBER: 74:73514  
 ORIGINAL REFERENCE NO.: 74:11886h,11887a  
 TITLE: Vitamin K activity of phylloquinone oxide  
 AUTHOR(S): Bell, Robert Gale; Matschiner, John T.  
 CORPORATE SOURCE: Dep. Biochem., Univ. Rhode Island, Kingston, RI, USA  
 SOURCE: Archives of Biochemistry and Biophysics (1970), 141(2), 473-6  
 CODEN: ABBIA4; ISSN: 0003-9861  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI For diagram(s), see printed CA Issue.  
 AB The biol. activity of phylloquinone oxide in vitamin K (phylloquinone) (I)-deficient rats was approx. the same as that of I. In warfarin-treated animals, I was an effective anticoagulant antagonist, whereas the oxide was not unless it was administered 15 min before warfarin. Warfarin markedly changed the metabolism of I, resulting in a large preponderance

of the oxide in the liver of anticoagulant-treated animals, suggesting that I oxide, because of structural similarity, may be an inhibitor of I and that warfarin exerts its anticoagulant effect by causing accumulation of the oxide.

IT 25486-55-9  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(vitamin K activity of, warfarin treatment in relation to)  
RN 25486-55-9 ZCAPLUS  
CN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecen-1-yl)- (CA INDEX NAME)



L7 ANSWER 7 OF 9 ZCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1960:63791 ZCAPLUS

DOCUMENT NUMBER: 54:63791

ORIGINAL REFERENCE NO.: 54:12357a-c

TITLE: Effect of progesterone on estrogen-induced hypercalcemia in the sexually immature pullet

AUTHOR(S): Wright, L. A.; Maw, W. A.; Common, R. H.

CORPORATE SOURCE: Univ. Montreal

SOURCE: Canadian Journal of Animal Science (1959), 39, 137-44

CODEN: CNJNAT; ISSN: 0008-3984

DOCUMENT TYPE: Journal

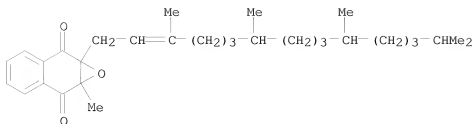
LANGUAGE: Unavailable

AB Sexually immature crossbreed pullets were given daily intramuscular injections of 0.5 mg. estradiol benzoate (I) for 14 days. Injection of 0.025-0.10 mg. of progesterone (II) did not affect the hypercalcemia induced by I but these levels of II augmented the increase of oviduct weight induced by I. Injection of 0.5 mg. II significantly increased the hypercalcemia, but had no effect on oviduct weight induced by I. Hypercalcemia induced by 0.5 mg. I daily for 14 days was not affected by 0.05-0.10 mg. II daily, even though these levels of II significantly increased the augmented oviduct weight induced by I. Injection of 0.5 mg. II daily increased the I-induced hypercalcemia significantly. As the dosage of II increased oviduct weight increased to a maximum and then declined.

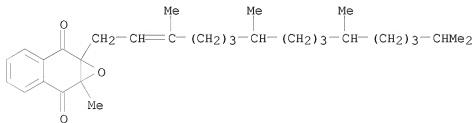
IT 25486-55-9  
(Derived from data in the 6th Collective Formula Index (1957-1961))

RN 25486-55-9 ZCAPLUS

CN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecen-1-yl)- (CA INDEX NAME)



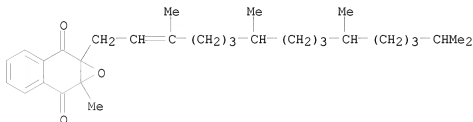
L7 ANSWER 8 OF 9 ZCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1955:20717 ZCAPLUS  
 DOCUMENT NUMBER: 49:20717  
 ORIGINAL REFERENCE NO.: 49:4105a-b  
 TITLE: Vitamin K and new coagulation factors  
 AUTHOR(S): De Nicola, Pietro  
 CORPORATE SOURCE: Univ. Pavia, Italy  
 SOURCE: 3a Giornata sci., Consiglio nazl. ricerche, Convegno  
 vitamine, Milan (1953), (Suppl. to Ricerca sci., Anno  
 23), 754-9  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Italian  
 AB Kappa factor and factor VII prepn. obtained from blood after dicumarol  
 treatment are less active than prepn. from untreated animals.  
 Vitamin K1 and its oxide can counteract this effect of dicumarol.  
 IT 25486-55-9, 1,4-Naphthoquinone,  
 2,3-epoxy-2,3-dihydro-2-methyl-3-phytyl-  
 (as coagulation factor)  
 RN 25486-55-9 ZCAPLUS  
 CN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-  
 tetramethyl-2-hexadecen-1-yl)- (CA INDEX NAME)



L7 ANSWER 9 OF 9 ZCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1944:29408 ZCAPLUS  
 DOCUMENT NUMBER: 38:29408  
 ORIGINAL REFERENCE NO.: 38:4313i,4314a  
 TITLE: Treatment of dicoumarol-induced  
 hypoprothrombinemic hemorrhage with vitamin K1 oxide  
 AUTHOR(S): Lucia, S. P.; Aggeler, P. M.  
 SOURCE: Proceedings of the Society for Experimental Biology  
 and Medicine (1944), 56, 36-7  
 CODEN: PSEBAA; ISSN: 0037-9727  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Unavailable  
 AB In a human subject, hypoprothrombinemia and the secondary hemorrhagic  
 phenomena induced by multiple large doses of dicoumarol appeared to be  
 corrected by the intravenous injection of a single dose of 500 mg. of  
 vitamin K1 oxide. After a latent period of 4 hrs. there was a marked

elevation of the prothrombin level, but full recovery required about 5 days.

IT 25486-55-9, 1,4-Naphthoquinone,  
2,3-epoxy-2,3-dihydro-2-methyl-3-phytyl-  
(hypoprothrombinemic hemorrhage treatment with)  
RN 25486-55-9 ZCAPLUS  
CN Naphth[2,3-b]oxirene-2,7-dione, 1a,7a-dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecen-1-yl)- (CA INDEX NAME)



=> s 16 and lesion  
54557 LESION  
L8 0 L6 AND LESION

=> s 16 and lesions  
107892 LESIONS  
L9 1 L6 AND LESIONS

=> d 19 ibib abs

L9 ANSWER 1 OF 1 ZCAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1943:42537 ZCAPLUS  
DOCUMENT NUMBER: 37:42537  
ORIGINAL REFERENCE NO.: 37:6717b  
TITLE: Medical progress. Skin changes of nutritional origin  
AUTHOR(S): Jeghers, Harold  
SOURCE: New England Journal of Medicine (1943), 228,  
678-86, 714-23  
CODEN: NEJMAG; ISSN: 0028-4793  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
AB The diseases discussed include carotenemia, phrynoderma, keratosis follicularis, ichthyosis, Sjogren's syndrome, cheilosis, angular stomatitis, purpura of vitamin-deficiency origin, palmar erythema and "dyssebacia." 167 references.

=> file medline  
COST IN U.S. DOLLARS  
FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
65.71	252.86

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  
CA SUBSCRIBER PRICE

SINCE FILE	TOTAL
ENTRY	SESSION
-8.20	-8.20

FILE 'MEDLINE' ENTERED AT 13:34:46 ON 12 JUN 2009

FILE LAST UPDATED: 11 Jun 2009 (20090611/UP). FILE COVERS 1949 TO DATE.



MEDLINE and LMEDLINE have been updated with the 2009 Medical Subject Headings (MeSH) vocabulary and tree numbers from the U.S. National Library of Medicine (NLM). Additional information is available at

[http://www.nlm.nih.gov/pubs/techbull/nd08/nd08\\_medline\\_data\\_changes\\_2009.html](http://www.nlm.nih.gov/pubs/techbull/nd08/nd08_medline_data_changes_2009.html).

On February 21, 2009, MEDLINE was reloaded. See HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

See HELP RANGE before carrying out any RANGE search.

```
=> s vitamin k1 oxide
      149527 VITAMIN
      8986 K1
      157467 OXIDE
L10      91 VITAMIN K1 OXIDE
          (VITAMIN(W)K1(W)OXIDE)
```

```
=> s l10 and dermatol?
      38526 DERMATOL?
L11      0 L10 AND DERMATOL?
```

```
=> s l10 and dermat?
      142692 DERMAT?
L12      0 L10 AND DERMAT?
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```
=> s l6 and dermat?
      87 L3
      3653220 PY > 2003
      142692 DERMAT?
L13      0 L6 AND DERMAT?
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=>
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